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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,979	07/11/2003	Takashi Nakamura	240263US2	2874

22850 7590 01/10/2006

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ALEXANDRIA, VA 22314

EXAMINER
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SHENG, TOM V

ART UNIT	PAPER NUMBER
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2677

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/616,979

**Applicant(s)**

NAKAMURA ET AL.

**Examiner**

Tom V. Sheng

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-23 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 is/are allowed.
- 6) ☒ Claim(s) 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/03, 6/24, 11/15.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of claim 24 in the reply filed on 10/13/2005 is acknowledged. The traversal is on the ground(s) that the claims of the present application would have to be searched in a handful of subclasses and without substantial additional effort and would not place a serious burden on the Examiner. This is not found persuasive because a disciplined search requires searching several subclasses in more than one class. Moreover, even a search within one subclass would involve detailed consideration of prior arts in reference to the specific species of applicants' invention. In any case, the Examiner believes claim 25 is a narrower claim based on claim 24 and thus would be considered.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

2. Claim 25 is objected to because of the following informalities: line 16, please delete "either" and change "one of a" to "one of said". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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4. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As for claim 25, lines 10-13, it is not clear how a plurality of shift registers would convert the digital signals into only "a first serial signal". As shown clearly in fig. 65, 66A and page 53, lines 1-18 of specification, shift registers 95a and 95b each generates its own serial signal, and P/S conversion circuit 96 (i.e. the selector) receives in one of the two serial signals at a time in accordance with the HCLK signal. In order to overcome the rejection and be in agreement with other limitations in the claim, the Examiner suggests changing to "a plurality of shift registers formed on said insulation substrate that convert said digital signals into a plurality of first serial signals and output said first serial signals".

***Allowable Subject Matter***

5. Claim 24 is allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: none of the prior arts of record teaches, inter alia, the limitations "wherein said shift register has: a first shift register which converts said digital signal of m (m is an integer equal to or more than 2) bits into a first serial signal and outputs the first serial signal; a second shift register which converts said digital signal of n (n is an integer equal to or more than 2) bits into a second serial signal and outputs the second serial

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signal; and a serial signal selector which selects either of said first or second serial signal and outputs the selected signal."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V. Sheng whose telephone number is (571) 272-7684. The examiner can normally be reached on 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Sheng  
December 29, 2005

AMR A. AWAD  
PRIMARY EXAMINER  
